

Appl. No. 10/676,553
Amdt. Dated May 5, 2005
Reply to Office Action of March 22, 2005

Amendments to the Specification:

Please replace paragraph [0009] with the following amended paragraph:

[0009] It has now been found that the foregoing and related objects may be readily attained in a machine tool installation for laser cutting of sheet workpieces comprising a workpiece support, an elongated machine frame of generally C-shaped configuration providing an arm extending over the workpiece support, and a track on the arm and extending longitudinally of the frame. A motion unit is suspended from the track and mounted for movement therealong with one end located adjacent the outer side of the workpiece support. Drive means is provided for moving the motion unit bidirectionally along the track, and a laser cutting unit is mounted on the motion unit and includes a laser cutting head movable thereon in an axis perpendicular to the arm. Drive means for moving the laser cutting unit along the motion unit, the laser cutting unit being movable to the one end of the motion unit on the outer side of the workpiece support for facile servicing thereof by an operator. A controller is operable to control movement of the motion unit along the track to effect motion of the motion unit and of the laser cutting head relative to a workpiece on the workpiece support to produce cut parts, and to position the laser cutting unit at the one end of the motion unit adjacent the outer side of the workpiece support for servicing of the laser cutting head.

Please replace paragraph [0010] with the following amended paragraph:

[0010] Preferably, a pair of parallel tracks is provided on the arm of the machine frame and the motion unit is movable thereon. The motion unit drive means comprises a rack on the arm of the machine frame, a pinion on the motion unit engaged with the rack, and a bidirectional motor for driving the pinion. The motion unit has [a] guides on its lower surface extending perpendicularly to the machine frame arm, and wherein the laser cutting unit is movably mounted on the motion unit guides. The laser cutting unit is movable by a rack and pinion drive assembly and a reversible drive motor.

Please replace paragraph [0036] with the following amended paragraph:

[0036] To [correct] connect the motion unit 20 to the loading and unloading units 22, 24, coupling devices 90 are provided on the loading and unloading units 22, 24. These are used not only to couple the motion unit 20 to the loading and unloading units 22, 24 but also to engage the machine frame 10 to retain the unit in its home position when uncoupled from the motion unit 20. The coupling device 90 will normally be engaged with the unload[ed]ing unit and snap into engagement with the motion unit 20. When the units 22, 24 are latched in the home position, the motion of the motion unit 20 away from the unit 22, 24 will unlatch the control unit from the coupling device 90.

Please replace paragraph [0041] with the following amended paragraph:

[0041] Turning next to Figure 8b, the motion unit 20 has now moved the unloading unit 24 into its operative position over the workpiece support table 16. At this point, the fork assemblies 44a, 44b (added space) are moved to their open position and the frame 42 with the fork assemblies 44a, 44b is moved downwardly to a position below the upper surface of the grid 52. The fork assemblies 44a, 44b are moved to their closed position with the forks 45 being disposed between the grid elements 52. The frame 42 is then moved upwardly and the forks 45 lift the skeleton and the parts 28 from the surface of the workpiece support table 16 since they are now supported on the fork assemblies 44a, 44b. At this point in time, the motion unit 20 has been engaged by the coupling device 90 to the loading unit 22, and the loading unit 22 has picked up a sheet workpiece 26.